FORESTRY 232 – SILVICS AND DENDROLOGY
Fall 2021 SYLLABUS

Lecture Instructor: Dr. Richard Hauer, 323 CNR, rhauer@uwsp.edu, 715-346-3642 (office)

Office Hours: Monday 8:00 – 8:50 am, Wednesday 8:00 – 9:50 am via Zoom Link Below: https://wisconsin-edu.zoom.us/j/99948636266?pwd=U1VFckpRUHp1RitzWHZUTnlyc2UyUT09&from=addon **passcode 626636**. Students are encouraged to schedule an appointment in case I am away due to scheduled or unscheduled conflicts. It is recommended that you seek assistance if needed.

Course Meeting Time and Location: Lecture meets in TNR 120 on Monday and Wednesday from 1:00 – 1:50 pm. Labs meet in TNR 300, see Lab syllabus for assigned lab meeting time.

Attendance: Did you know that students who attend class regularly do better. Pick a schedule that works and try to stick to it. Active participation in class is expected and greatly increases the odds you will master a subject. Absence from an exam or quiz will result in a zero unless you make prior approval or arrangements.

Learning Objectives: After completion of this course you should be able to:
1) Identify trees and shrubs in the field by leaf, twig, fruit, bark, and other relevant attributes.
2) Identify woody plants with a key by twig and fruit.
3) Associate plant range and site conditions with covered tree and shrub species.
4) Predict the likelihood of plant tolerance to site conditions in urban and rural forests.
5) Associate important silvics and morphological characteristics with plants covered in the class and their uses in urban and rural forests.

Grade Policy: Grades are based on exams and laboratory quizzes as follows:

Evaluation Area	% of Grade
Lab – Quizzes (11 quizzes)	55%
Lecture – Exams (5 exams)	45%

Mean Score	Letter Grade	Mean Score	Letter Grade
100 - 93	A	79 - 78	C+
92 - 90	A-	77 - 73	C
89 - 88	B+	72 - 70	C-
87 - 83	B	69 - 68	D+
82 - 80	B-	67 - 60	D
		<60	F

Texts: Assignments are from the following texts as indicated in the attached outline:

Barnes, B.V., D. R. Zak, S. R. Denton, and S. H. Spurr. 1998. Forest Ecology. 4th ed. John Wiley & Sons, New York, N.Y. 774 pp.

Hardin, J.W., Leopold, D.J., and F.W. White. 2001. Harlow & Harrar's Textbook of Dendrology. 9th Ed. McGraw-Hill Book Co., New York, N.Y. 534 pp.

On line: The following links are useful on-line references for silvics and woody plant ID
Silvics of North America: https://www.srs.fs.usda.gov/pubs/misc/ag_654/table_of_contents.htm
Flora of Wisconsin: http://wisflora.herbarium.wisc.edu/
Trees of Wisconsin: https://www.uwgb.edu/biodiversity/herbarium/trees/tree_intro01.htm
Dendrology Factsheets at Virginia Tech: https://dendro.cnre.vt.edu/dendrology/factsheets.cfm
University of Connecticut: http://hort.uconn.edu/
Oregon State University Plants: http://landscapeplants.oregonstate.edu/
Gymnosperm Database: http://www.conifers.org/
USDA Plants Database : http://plants.usda.gov/
The International Plant Names Index: http://www.ipni.org/

Course Location: Canvas Portal (https://www.uwsp.edu/canvas/Pages/default.aspx)

Lecture Schedule

Dates	Topic (# of Lectures)	Readings
Sept 6	No Lecture, Labor Day	
Sept 8	Introduction and Silvics Concepts	Barnes et al. Ch. 1
Sept 13	Introduction and Silvics Concepts	Hardin et al. Ch. 6
Sept 15	Introduction and Silvics Concepts	Barnes et al. Ch. 8 & 9
Sept 20	Systematics Gymnosperms: Ginkgoaceae, Taxaceae	Barnes et al. Ch. 4 Hardin Ch2, pp. 97-100
Sept 22	**Hour Exam (1)**	Hardin pp. 101-208
Sept 27	Pinaceae	Hardin pp. 101-208
Sept 29	Pinaceae	Hardin pp. 101-208
Oct 4	Work on Self-Treevaluation Exercise	Hardin pp. 101-208
Oct 6	Work on Self-Treevaluation Exercise	Hardin pp. 209-242
Oct 11	Pinaceae	
Oct 13	Cupressaceae	Hardin pp. 209-242
Oct 18	**Hour Exam (2)**	
Oct 20	Cupressaceae	Hardin pp. 209-242
Oct 25	Angiosperms: Magnoliaceae	Hardin pp. 243-254
Oct 27	Lauraceae, Platanaceae	Hardin pp. 255-263
Nov 1	Hamamelidaceae, Ulmaceae	Hardin pp. 263-278
Nov 3	Moraceae, Juglandaceae	Hardin pp. 278-304
Nov 8	**Hour Exam (3)**	
Nov 10	Juglandaceae, Fagaceae	Hardin pp. 305-359
Nov 15	Fagaceae, Betulaceae	Hardin pp. 305-359
Nov 17	Betulaceae	Hardin pp. 359-375
Nov 22	Tiliaceae, Salicaceae	Hardin pp. 379-408
Nov 24	**Virtual Hour Exam (4)**	
Nov 29	Rosaceae	Hardin pp. 409-415
Dec 1	Fabaceae	
Dec 6	Hippocastanaceae, Sapindaceae (syn Aceraceae)	
Dec 8	Sapindaceae (Aceraceae), Oleaceae, Bignoniaceae	
Dec 14	**Hour Exam (5) (Tuesday 12:30 pm – 2:30 am)**	

Lab Schedule

Lab Instructors

Dr. Richard Hauer, 323 TNR, rhauer@uwsp.edu, 715-346-3642
Dr. Holly Petrillo, 363 TNR, Holly.Petrillo@uwsp.edu, 715-346-4230
Dr. Melinda Vokoun, 376 TNR, mvokoun@uwsp.edu, 715-346-2342

Lab sections (Instructor)

1 – W 8:00 – 10:50 (Vokoun)
2 – M 9:00 – 11:50 (Vokoun)
3 – R 9:00 – 11:50 (Vokoun)
4 – M 2:00 – 4:50 (Hauer)
5 – T 2:00 – 4:50 (Petrillo)

Date (week starting)	Topic
Sept. 2-8 on-line	Introduction in CANVAS, 5, & 7 in Textbook of Dendrology)
Sept. 7, 8, 9, 13	**Intro Quiz (1%)** Campus and Schmeeckle Reserve
Sept. 14, 15, 16, 20	**Quiz 1 (5%)** Campus
Sept 21, 22, 23, 27	**Quiz 2 (5%)** Jordan Park
Sept 28, 29, 30, Oct 4	**Quiz 3 (5%)** Wisconsin River Flowage
Oct 5, 6, 7, 11	**Quiz 4 (5%)** Iverson Park
Oct 12, 13, 14, 18	**Quiz 5 (5%)** Steinhaugen
Oct 19, 20, 21, 25	**Quiz 6 (5%)** Campus
Oct 26, 27, 28, Nov 1	**Quiz 7 (5%)** Campus
Nov 2, 3, 4, 8	**Quiz 8 (5%)** Campus
Nov 9, 10, 11, 15	**Quiz 9 (5%)** Campus
Nov 16, 17, 18, 22	**Quiz (2% & 8%)** Twigs
Nov 23, 24, 25, 29	No Lab (Thanksgiving Break)
Nov 30, Dec 1, 2, 6	**Quiz (2% & 8%)** Cones and Fruit

The lowest two quiz scores will be dropped, with 7 quizzes worth 35% of your course grade.

Lab grades: Lab quizzes make up 55% of your course grade. Each field lab quiz is weighted 5% equally (35% total), twig (10% total), and cone/fruit (10% total) labs will be combined to determine your lab grade. All field quizzes are closed book and you will need to know common name, genus, species, and family for species seen previously on fieldtrips. Species covered in lab generally will have been reviewed in the field as well, but regardless, the same information is required.

Text and supplies for lab:(Available online). Harlow, William M. 1946. Fruit Key and Twig Key. Dover Publications, Inc.

Barnes, B.V., and W.H. Wagner, Jr. 2004. Michigan Trees, Revised and Updated. The University of Michigan Press, Ann Arbor, Michigan is very helpful, but *optional*